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BOOK REVIEW

The beetles of the Pacific Northwest. Part V. Rhipiceroidea, Sternoxi, Phytophaga, Rhyncophora, and Lamellicornia, by Melville H. Hatch. Jan., 1972. University of Washington Press, Seattle, Wash. 650p; 687 fig. Cloth \$20.00

With the completion of this monumental series, the year 1972 is bound to be a banner year for Coleopterists, even if nothing else significant tran-There have been extensive local or faunal studies in Europe for many years, but we have had notably few (e.g., Blatchley's "Coleoptera of Indiana", 1910) such works in this country. Dr. Hatch has devoted a lifetime of study and dedicated effort in completing this 5-volume set which started in 1953. It is certainly not necessary to enumerate the problems involved in such a pretentious task as to present a faunal treatment of the largest order in the animal kingdom and in a geographic area as large as British Columbia, Washington, Oregon, and Idaho. The 19 years between the first and last volumes undoubtedly have been filled with many hours of the "midnight oil" for Dr. Hatch and his collaborators.

At the beginning of the series Dr. Hatch estimated that 3,000 species would be involved—the kind of number which has dissuaded most workers who would contemplate such regional faunas. In the final analysis there

are about 4,300 species treated in the 2,164 pages and 2,727 fig. It will probably be a long time before another lifetime is available for such an undertaking and the sacrifices necessary to see it to completion. Aside from any shortcomings noted by individual specialists, coleopterists in particular owe Dr. Hatch a "standing ovation" for such prodigious effort. The entomologists in the area covered are indeed fortunate in having such a manual as a basis for identifying their beetles, determining what is known about a given species, and from which future studies can easily proceed. The Pacific Northwest will now be the envy of the remainder of the country—and just maybe this work will stimulate similar work elsewhere.

For those who have not kept up with the series as it was issued, the following list presents the statistics for each volume:

Part I. Introduction and Adephaga. 1953. 248p., 38 pl. of 355 fig. \$15.00. Part II. Staphyliniformia, 1957. 395p., 37 pl. of 549 fig. \$15.00.

Part III. Pselaphidae and Diversicornia 1. 1962. 503p., 66 pl. of 818 fig. \$20.00.

Part IV. Mocrodactyles, Palpicornes, and Heteromera. 1965. 268p., 28 pl. of 318 fig. \$12.50.

Part V. Rhipiceroidea, Sternoxi, Phytophaga, Rhyncophora, and Lamellicornia. 1972. 650p., 55 pl. of 687 fig. \$20.00.

The entire set of 5 bound volumes is available from the publisher at \$82.50. Some of the volumes were originally advertised at a lower price (e.g., Part I, unbound, \$5.00; Part II, bound, \$7.00). However, I suspect that the University of Washington Press, like most of its counterparts at other universities, will still "lose money" in the over-all production. This makes it even more commendable that the Press should provide this valuable reference to the scientific community. To the worker with a small budget for literature the price might appear high, but compared with the cost of compilation and printing, it would be a bargain at double this figure.

Part V is the largest volume of the set, treating about 1,300 species of the following families: Rhipiceridae, Elateridae, Eucnemidae, Throscidae, Buprestidae, Cerambycidae, Chrysomelidae, Bruchidae, Anthribidae, Curculionidae, Platypodidae, Scolytidae, Lucanidae, and Scarabaeidae. The following specialists are listed as collaborators for this volume: M. C. Lane, H. P. Lanchester, W. F. Barr, S. M. Hogue, L. G. Gentner, B. D. Valentine, S. L. Wood. The Preface was written in May, 1971, and contains information on articles affecting the body of the text, but which were noted too late The Appendix is an extremely useful 16-page list of abfor inclusion. breviations of names of authors of genera and species, with their full names, dates of birth and death (or where unknown, dates of publishing), city or county where they lived, and references to their occupation or pro-The 28-page Bibliography is somewhat different from most articles cited only once or twice are listed only in the text, and others are abbreviated there and cited completely in the terminal bibliography. There is a complete index to generic, subgeneric, and specific names.

Naturally such as extensive treatise is out of date when published and, as Dr. Hatch states, "... is likely to contain mistakes of identification and other errors of both commission and omission." Some such errors have been listed in reviews of the first 4 parts, and a list of errata for Parts III & IV is provided in Part V.

Although I don't feel qualified to review critically the contents of all Parts, I have made the following notes on Part V, although no thorough review is attempted:

- p. 6—The family Throscidae is listed in the Key, although the Table of Contents and the text on page 53 list Trixagidae.
- p. 433—"Sinodendrox" should be Sinodendron.
- p. 462-"violacepus" should be violaceous.
- p. 434—couplet 3' of the key lists ". . . scutellum covered by base of pronotum" as a character of Scarabaeinae, but, of the 3 genera covered, *Oniticellus* (p. 460) has a visible scutellum.
 - p. 453 & 455—"Aphodius leopardus" is treated under 2 different subgenera, with slightly differing accounts.
 - p. 462—The describer of Onthophagus hecate should be Panzer, not Payk.
 - p. 465—The author of Serica should be W. S. MacLeay, not W. J. MaCl.
 - p. 463-64—Species of the genus *Trox* are listed in the Key and text without reference to male genitalia which are the most diagnostic features.
 - p. 484—The old name *Trichinus* Kirby 1837 is revived to replace *Trichinus* Casey, used by most American authors.
 - p. 458—Ataenius is described as "rufous" although most species are nearly black.
 - p. 616—Fig. 3 & 6 are labelled "Lechriops californica", although Fig. 6 is obviously a Ceutorhynchine and unlike Fig. 3. Plate XLI, Fig. 3 is also an example of the poor reproduction when a drawing was copied from another publication; Fig. 4 on the same plate is an exceptionally fine reproduction.

The 2,727 figures add immensely to the usefulness of the books, and many are originals, although full use was made of existing illustrations from many sources. The habitus drawings of Mrs. Helen Houk are worthy of special note because of their technical accuracy, as well as esthetic appeal. Too seldom are even smaller papers illustrated as well or as extensively as this enormous work.

As an editor, I have several points of style which I find objectionable, but they are perhaps personal preferences and do not seriously affect the book's usefulness. The descriptions are incorporated in the Keys, and the couplets, although dichotomous, are not side by side for easy comparison. Scientific names, in both text and bibliography, are not italicized except for synonyms. Journal is abbreviated "Jr." although this abbreviation is normally reserved for "junior."

The arrival of such a monumental work should provide a great stimulus for future work in the Pacific Northwest. Coleopterists in that area can fulfill part of their obligation to Dr. Hatch by continuing to enlarge and improve upon his efforts.—R. E. Woodruff.